September 13, 1999

To: Federal Geographic Data Committee - Standards Working Group

From: Earth Cover Working Group

Subject: Proposal for an Earth Cover Classification Standard.

Project Title: Earth Cover Classification Standard.

Date of Proposal: September 1999.

Type of Standard Proposed:

A uniform earth cover classification standard that classifies earth surface features.

Submitting Organization:

Earth Cover Working Group (ECWG), Co-chaired by the United States Department of Commerce (USDoC) National Oceanic and Atmospheric Administration (NOAA) and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

Point of Contact:

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Objectives:

The purpose of the Earth Cover Classification Standard (ECCS) is to facilitate the production and exchange of earth cover digital data. The standard will define common terminology and will be applicable over extensive areas and at a range of scales. Application of the ECCS will be repeatable and consistent and will be compatible, where possible, with other earth cover/land cover classification systems.

Scope:

The ECCS will identify the classification categories for earth cover data. The ECCS categories will encompased 100% of the earth's surface and, in orientation, will look down upon the earth. The ECWG will coordinate with the Federal Geographic Data Committee FGDC) Subcommittees to refine the categories. Vegetation, water, snow, ice, human constructions, bare soil, sand and exposed rocks qualify as cover surfaces.

Land use classifications will NOT be developed. Detailed identification will not be developed for cover categories such as vegetation, soil, transportation, wetlands and cultural features because they are being addressed by other FGDC subcommittees or are already provided by the FGDC's "Vegetation Classification standard."

Justification/Benefits:

This standard is to meet the FGDC responsibility under E.O. 12906, dated April 13, 1994 and OMB Circular(s) A-16 and A-119. There is no current national FGDC approved ECCS. An ECCS provides common terminology and definition for earth cover. By not addressing interpretations such as land use, the ECCS will be more flexible, simpler to use, and to understand. Another benefit will be an increase in the efficiency of using earth cover data as users share experience involving applications. At some point in time, the FGDC will develop a land use standard, and it is expected by the ECWG that the ECCS will be a necessary building block in that land use standard.

Development Approach:

The Earth Cover Working Group was established on February 13, 1996, by the FGDC Coordination Group. The ECWG will formulate the ECCS by beginning with the work of the FGDC Vegetative Subcommittee and will incorporate material as appropriate from other FGDC subcommittees. Non-vegetated areas of the globe, such as rocky or permanently snow or ice covered land will have earth cover categories developed. Cover categories for areas covered by water or ice, irregardless of depth, will also be accommodated, as appropriate in the ECCS.

It is expected that the FGDC accuracy standards will be incorporated in the ECCS.

Related Standards:

The proposed ECCS will utilize the FGDC's "Vegetation Classification Standard." It is also expected that the completed Wetlands Classification Standard will integrate with the ECCS. The ECCS should also be part of the foundation for land use studies. While the ECCS will utilize the Vegetative Classification Standard, there may be a need for either one to be revised.

There also are other, earlier, classification systems, such as Andersen, et.al.(1976) that combine land use and earth cover. The ECCS intends to be as compatible with these early systems as possible but will not incorporate land use terminology. At some point in time, the FGDC will develop a land use standard, and the ECWG expects that the ECCS will be a necessary building block in that land use standard.

Development and Completion Schedule:

A. Develop draft Earth Cover Classification Standard. October 1999
B. Develop a comment procedure for the ECCS. November 1999
C. Revise ECCS as a result of comments received. February 2000
D. Operate test pilots of the revised ECCS. Spring 2000
E. Incorporate changes revealed by pilot tests. May 2000
F. Submit revised Standard to the FGDC Standard's June 2000
Committee.

Resources Required:

The ECCS is being developed using existing staffing and funding from the ECWG membership and the FGDC.

Potential Participants:

To date the ECWG has consulted with a variety of government agencies and organizations in the development of this classification scheme. The principal organizations that have been involved since beginning of the ECWG are United States Geological Service, NOAA, NRCS, Defense Department's Corp of Engineers, Bureau of the Census, and the Department of the Interior. The ECWG will continue to solicit involvement and input from other Federal agencies, that should be involved, and from State, Local and private groups as the standard moves through the formal FGDC process.

Other Targeted Authorization Bodies:

This proposed standard is not currently targeted for consideration by any other authorizing bodies, such as American National Standards Institute. As a classification standard, it is expected that this proposed standard will follow the FGDC approving process.